



Locksmith

Study Guide

Assessments:

4015 Locksmith Technician

4017 Manager



career **tech** ✓
Testing
The Provider of Online Testing Solutions



Overview

This study guide is designed to help candidates prepare for licensure in locksmith occupations in Oklahoma. It not only includes information about each of the examinations, but also the skills standards upon which the examinations are based, resources that can be used to prepare for the examinations and test taking strategies.

Each of the sections in this guide provides useful information for candidates preparing for the examinations.

- Locksmith Licensure Examinations
 - ▶ Assessment Information
 - ▶ Standards and Test Content
 - ▶ Sample Questions
 - ▶ Test Writing Resources
 - ▶ Abbreviations, Symbols and Acronyms
- Strategies for Test Taking Success
- Notes

These assessments were developed in partnership with the Oklahoma Department of Labor, the state agency charged with regulating the Oklahoma locksmith industry and licensing individuals and companies who sell, install, maintain, and monitor alarm, locksmith, and fire sprinkler equipment. Each examination measures the candidate's mastery of knowledge and skills expected of workers in the area of licensure he/she is seeking.

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CareerTech and Competency-Based Education: A Winning Combination

Competency-based education uses learning outcomes that emphasize both the application and creation of knowledge and the mastery of skills critical for success. In a competency-based education system, students advance upon mastery of competencies, which are measurable, transferable outcomes that empower students.

Career and technology education uses industry professionals and certification standards to identify the knowledge and skills needed to master an occupation. This input provides the foundation for development of curriculum, assessments and other instructional materials needed to prepare students for wealth-generating occupations and produce comprehensively trained, highly skilled employees demanded by the work force.

Tools for Success

CareerTech education relies on three basic instructional components to deliver competency-based instruction: skills standards, curriculum materials, and competency assessments.

Skills standards provide the foundation for competency-based instruction and outline the knowledge and skills that must be mastered in order to perform related jobs within an industry. Skills standards are aligned with national skills standards and/or industry certification requirements; therefore, a student trained to the skills standards is equally employable in local, state and national job markets.

Curriculum materials and textbooks contain information and activities that teach students the knowledge and skills outlined in the skills standards. In addition to complementing classroom instruction, curriculum resources include supplemental activities that enhance learning by providing opportunities to apply knowledge and demonstrate skills.

Certification Assessments test the student over material outlined in the skills standards and taught using the curriculum materials and textbooks. When used with classroom performance evaluations, certification assessments provide a means of measuring occupational readiness.

Each of these components satisfies a unique purpose in competency-based education and reinforces the knowledge and skills students need to gain employment and succeed on the job.

Measuring Success

Evaluation is an important component of competency-based education. Pre-training assessments measure the student's existing knowledge prior to receiving instruction and ensure the student's training builds upon this knowledge base. Formative assessments administered throughout the training process provide a means of continuously monitoring the student's progress towards mastery.

Certification assessments provide a means of evaluating the student's mastery of knowledge and skills. Coaching reports communicate assessment scores to students and provide a breakdown of assessment results by standard area. The coaching report also shows how well the student has mastered skills needed to perform major job functions and identifies areas of job responsibility that may require additional instruction and/or training.

Assessment Information

How are the assessments developed?

The assessments are developed by the CareerTech Testing Center in partnership with the Oklahoma Department of Labor. Items for the exams were developed and reviewed by committees of subject matter experts within each of the licensure areas. All subject matter experts are professionals who have many years of experience in the industry.

How do I register for an exam?

Candidates for licensure in the alarm, locksmith, or fire sprinkler industry must contact a testing center to register for an exam. A list of testing centers and their contact information can be found at www.okhcp.com under the Alarm/Locksmith tab. Candidates will be required to show one of the following forms of photo identification:

1. valid, current driver's license issued by any state in the United States, or
2. valid, current state of Oklahoma identification card

Identification cards issued by other states or entities **will not** be accepted.

What do the examinations cover?

Each examination is aligned to the skills standards for that licensure area. The standards for each licensure area are contained in this study guide.

What is the benefit of taking the exam?

The assessments provide a measure of mastery of knowledge and skills needed by employees entering the locksmith industry. Students who score 70% or higher on the written examination and meet all licensure requirements will be issued a license by the Oklahoma Department of Labor.

Are the exams timed?

Yes. The test plan for each licensure area specifies the time allowed to complete the written examination. If the time allowed expires before the candidate is finished with the examination, the examination will automatically be submitted for scoring and all unanswered questions will be marked incorrect.

Can candidates use a calculator on the exam?

Yes, calculators may be used on these exams. If a calculator is needed, it will be provided by the testing center. Candidates will not be allowed to bring a calculator or electronic device with a calculator application into the testing area.

What is the testing fee for written examinations?

Candidates must pay all testing fees to the test site upon registration. The testing fee for the salesperson and manager exams is \$45 per exam if taken at a HCP test site or \$65 per exam if taken through the online proctor. The testing fee for the technician and fire sprinkler plan & design exam is \$60 per exam if taken at a HCP test site or \$85 per exam if taken through the online proctor.

Can candidates use code books or other resources during the examination?

All candidates may use a copy of the Oklahoma Alarm, Locksmith, and Fire Sprinkler Act. This resource will be provided by the test site and collected when the test is complete.

Candidates may bring and use publisher-bound code books as indicated in the charts below. **NOTE: Only publisher-bound books are allowed.** Candidates may not use photocopies that have been spiral bound, placed in a binder, etc. No loose pages of notes or codes are allowed. In addition, all references will be checked for handwritten notes specifically related to test questions. References that contain test-related notations will not be allowed.

The Oklahoma Department of Labor provides a link to a Business Folder that contains resources that Manager candidates may study while preparing for the exam. These documents are study resources only and **may not** be used during the test.

Licensure Area – Alarm and Locksmith	Allowed Code Books				
	NFPA 70	NFPA 72	NFPA 99	NFPA 101	NFPA 731
Locksmith Technician				✓	
Manager	✓	✓		✓	✓

What can candidates expect on Test Day?

The assessment is web-based and delivered exclusively online by a proctor in the testing center. Once the exam window opens, the entire assessment is visible. Candidates can skip questions and return to them later. However, it is important to answer all questions before submitting the test for scoring — unanswered questions will be counted wrong.

When will I receive my results?

Candidates will receive their results immediately upon completion of the testing. These results must be included with the candidate's licensure application and sent to the Oklahoma Department of Labor.

Can candidates retake an exam?

Candidates who do not pass the written examination may retest. Although there is no formal waiting period for retesting, the ability to offer candidates an opportunity for same day retesting varies by test site — many test sites book testing seats several days or weeks in advance.



Standards and Test Content

4015 Locksmith Technician 70 Questions — Two hour time limit

A. Demonstrate Understanding of Codes, Standards and Regulations — 18% (12 questions)

5. Explain the purpose and role of the Occupational Safety and Health Administration
6. Demonstrate an understanding of rules promulgated by the Oklahoma Department of Labor to enforce the Oklahoma Alarm, Locksmith, and Fire Sprinkler Industry Act

B. Demonstrate Knowledge of Key Lock Mechanisms and Components — 18% (15 questions)

1. Identify and describe the function of different types of locks
 - Passage locksets
 - Privacy locksets
 - Entry locksets
 - Deadbolt locksets
2. Identify common key types
3. Identify and describe functions, ratings, and door handlings related to lock hardware
4. Identify and describe common types of doors
 - Material type
 - Swing direction
5. Identify types of door closers



C. Maintain and Service Locks — 35% (25 questions)

1. Demonstrate dismantling and assembly of lock cylinders
 - Wafer tumbler locks
 - Pin tumbler cylinders
2. Describe recombination of lock mechanisms
 - Pin tumbler cylinders
 - Wafer tumbler locks

3. Identify commonly used key blanks
4. Demonstrate ability to duplicate broken keys
5. Demonstrate ability to originate keys to locks
 - By code
 - By disassembly
6. Demonstrate ability to pin cylinders
7. Differentiate between standard security and high security keys

D. Install Locksets and Related Hardware on Doors — 9% (6 questions)

1. Demonstrate ability to remove, repair and install lock hardware used on doors and cabinets
2. Demonstrate ability to install and service passage, privacy and entry hardware

E. Practice Job Site Safety — 20% (14 questions)

1. Survey job site for unsafe work conditions and report appropriately
2. Identify and demonstrate the appropriate use of hand and power tools
3. Identify and demonstrate the appropriate use of job site equipment
4. Practice safe ladder usage
5. Use proper fall techniques and practices
6. Use head, ear, eye and foot protection properly
7. Read and interpret Safety Data Sheets
8. Recognize injuries and health conditions commonly encountered at job sites
10. Identify precautions that should be taken when working in confined spaces and other potential hazardous environments

F. Service Automotive Locks — (0 questions)

1. Demonstrate ability to open vehicles
 - Free-play pawl manipulation
 - Vertical lock manipulation
 - Horizontal manipulation
 - “Under the window” tool
 - Plastic strip
 - Wedging tools
2. Service automotive locks
 - Originate keys
 - Rekey locks
 - Remove/reinstall locks
 - Remove broken keys
 - Service malfunctioning lock mechanisms
 - Repair locks



Standards and Test Content

4017 Manager

55 Questions — 90 minute time limit

The Manager exam for alarm industry tests candidates over knowledge in the following areas:

Duty A: Demonstrate an Understanding of Codes, Standards and Regulations — 47% (26 questions)

Duty B: Understand Human Resources Issues Related to Managing Employees — 2% (1 question)

Duty C: Understand Insurance Issues Facing Managers — 4% (2 questions)

Duty D: Demonstrate Knowledge of Workplace Safety Requirements — 47% (26 questions)

Although some knowledge areas overlap with those found on the salesperson and technician exams, questions on the Manager assessment are directed toward the level of knowledge or understanding expected of those holding management positions in alarm, locksmith and fire sprinkler companies.

Sample Questions Locksmith Industry Exams

1. With regard to the written exam required for licensure, which of the following statements is true?
 - a. Candidates must reapply with the Oklahoma Department of Labor before retesting.*
 - b. Candidates may retest immediately.
 - c. Candidates must wait at least 30 days before retesting.
 - d. Candidates are not allowed to retest.


2. Which of the following factors increases the chance of shock or electrocution?
 - a. high outdoor temperatures
 - b. high humidity*
 - c. insulated head protection
 - d. dry cotton clothing

3. A technician fell off a ladder and injured his wrist. His wrist is swollen and turning purple, and the technician has limited ability to move his hand at the joint. What type of injury did the technician likely sustain?
 - a. strain
 - b. sprain*
 - c. closed fracture
 - d. greenstick fracture

4. What is the recommended treatment for a burn where the victim's skin is red and/or blistered?
 - a. Apply a lotion or ointment to protect the damaged tissue and relieve pain.
 - b. Wrap a sterile, gauze bandage loosely around the burn to protect against further injury.
 - c. Rinse or submerge the affected area in cool water to stop the burn process.*
 - d. Apply an ice pack to the affected area to reduce swelling and discomfort

5. The key shown below matches locks manufactured by:

- a. Schlage
 - b. Kwikset*
 - c. Master
 - d. Weslock



6. What is a feature of a storeroom lock?
 - a. remains locked at all times
 - b. requires a key to enter*
 - c. requires callers to enter a bell
 - d. unlocks from the inside only

Resources Used for Writing and Validating Test Items Locksmith Industry Exams

- International Building Code
- Underwriters Laboratory Standards
- Manufacturer's websites (key blanks)
- *The Complete Book of Locks and Locksmithing*, Bill Phillips
- OSHA.com (Occupational Safety and Health Administration)
- *Webster's Medical Desk Dictionary*
- www.mayoclinic.org/first-aid
- www.webmd.com/first-aid

Abbreviations, Symbols and Acronyms on the Locksmith Industry Exams

When abbreviations, symbols or acronyms are more commonly used in written and verbal communications within the locksmith industry than the words they represent, they will also be used on the written examination required for certification. The following is a list of abbreviations, symbols and acronyms used on the locksmith industry examinations.

'	Foot/feet
"	Inch/inches
A	Amps/Amperes
AC	Alternating Current
BOCA	Building Officials and Code Administrators International, Inc.
CDMA	Code Division Multiple Access
DC	Direct Current
IBC	International Building Code
ICC	International Code Council
IRC	International Residential Code
kΩ	Kilo ohms or Kohms
mA	milliamps/milliamperes
OSFM	Oklahoma State Fire Marshal
UL	Underwriters Laboratory
V	Volts
VA	Volt-amp
VAC	Watts, Alternative Current
VDC	Watts, Direct Current
W	Watts
Ω	Ohms

Test Taking Strategies

This section of the study guide contains valuable information for testing success and provides a common-sense approach for preparing for and performing well on any test.

General Testing Advice

1. Get a good night's rest the night before the test — eight hours of sleep is recommended.
2. Avoid junk food and “eat right” several days before the test.
3. Do not drink a lot or eat a large meal prior to testing.
4. Be confident in your knowledge and skills!
5. Relax and try to ignore distractions during the test.
6. Focus on the task at hand — taking the test and doing your best!
7. Listen carefully to the instructions provided by the exam proctor. If the instructions are not clear, ask for clarification.

Testing Tips

1. Read the entire question before attempting to answer it.
2. Try to answer the question before reading the choices. Then, read the choices to determine if one matches, or is similar, to your answer.
3. Do not change your answer unless you misread the question or are certain that your first answer is incorrect.
4. Answer questions you know first, so you can spend additional time on the more difficult questions.
5. Check to make sure you have answered every question before you submit the assessment for scoring — unanswered questions are marked incorrect.



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